



Crystal Mountain

Service Manual (100-115VDC)



ASPEN
(Bottled Water Cooler)

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Product Specification

Aspen

With its smooth classic lines the Aspen cooler will compliment any décor. The contoured drip tray enhances the shape of the cabinet and conveniently holds a cup or glass for hands free filling.

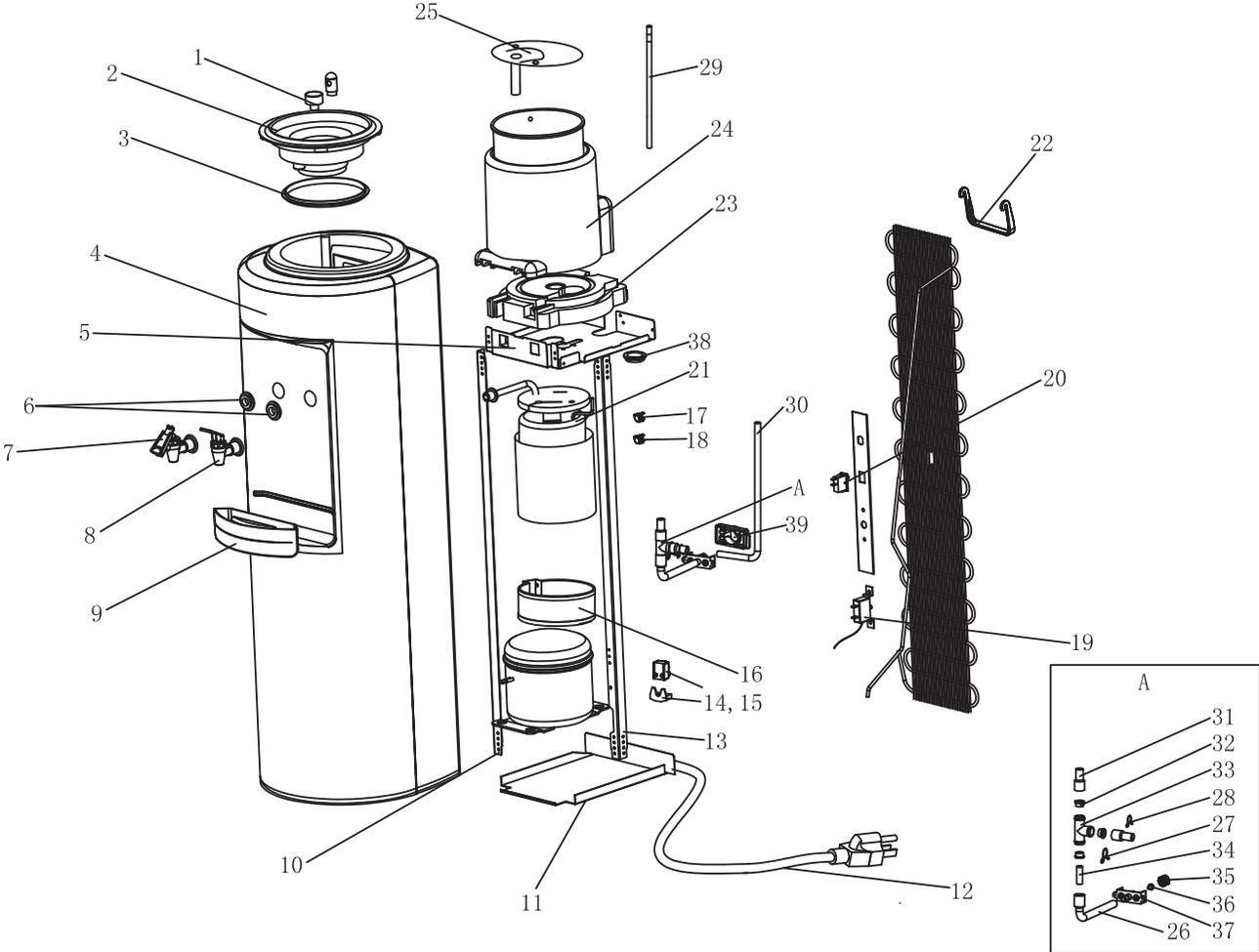


Model: Aspen 100-115VAC

Standard Cooler Specifications and Performance Data

ITEM		SPECIFICATIONS
POWER RATING		SINGLE PHASE
		100-115VAC 60Hz
STANDARD CURRENT		HOT & COLD: 4.5-5.1A
POWER	COLD	85W
CONSUMPTION	HOT	450W
COLD	COMPRESSOR	SINGLE PHASE MOTOR
	REFRIGERANT	R134a
	TEMP RANGE	41-50°F (5-10°C)
	VOLUME OF COLD RESERVOIR	0.9 gal (3.47L)
HOT	HEATER	BAND HEATER
	TEMP RANGE	165.2-197.6°F (74-92°C)
	TEMP CONTROL	179.6-192.2°F (82-89°C)
	CAPACITY(EXTERNAL HEATER)	>188.6°F 1.3 gal/H (>87°C - 5L/H)
	VOLUME OF HOT RESERVOIR	0.3 gal (1.47L)
REFRIGERANT CHARGE		1.2 oz (34g)
NOISE(SOUND POWER LEVEL)		44dB(A)
PRODUCT WEIGHT		H&C: 26.5 lb (12kg)
PRODUCT BOXED WEIGHT		H&C: 28.6 lb (13kg)
LOADING QUANTITY		20' FT: 238 UNITS
		40' FT: 504 UNITS

Exploded View

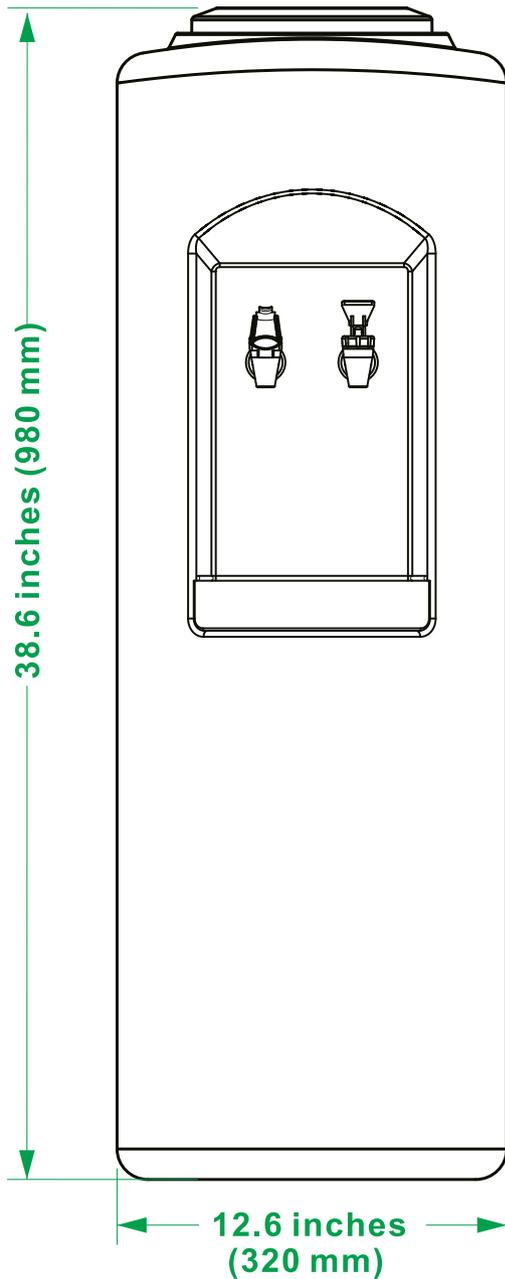


Parts Listing

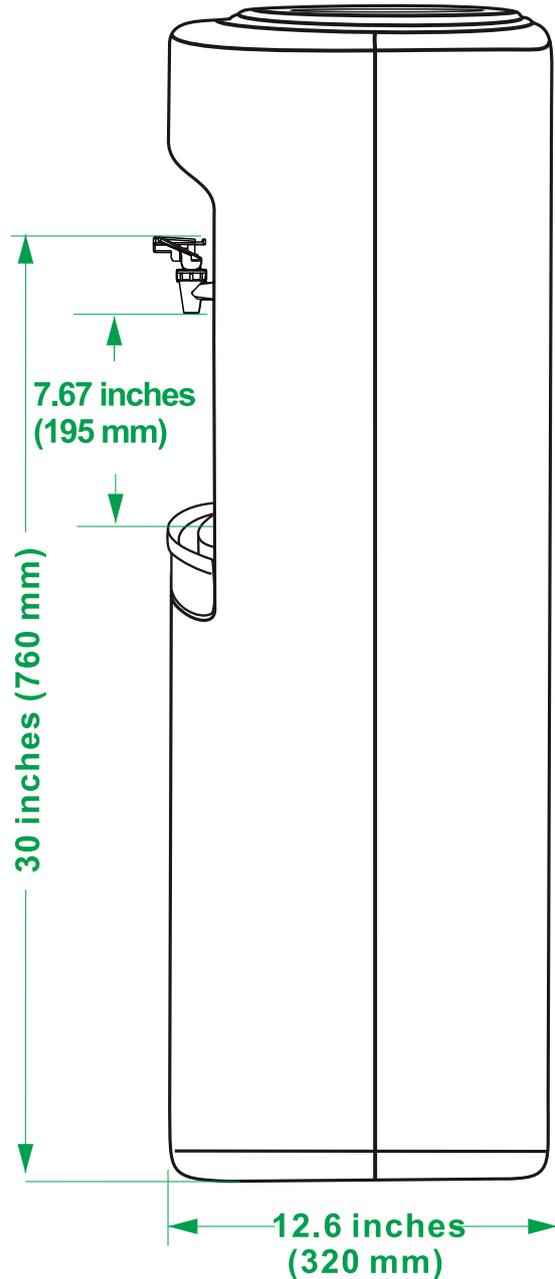
Item No	Item Description	ANSA2KTK1AC	ANSA2WTW1AC	ANSA2KHK1AC	ANSA2WHW1AC
1	Air Filter, Black	MIS-A300001	N/A	MIS-A300001	N/A
	Air Filter, White	N/A	MIS-A300002	N/A	MIS-A300002
2	Non Spill type device, Black	PLC-A300004-002	N/A	PLC-A300004-002	N/A
	Non Spill type device, White	N/A	PLC-A300005-00	N/A	PLC-A300005-002
3	Seal Ring, Inlet Connector	SIL-A300002	SIL-A300002	SIL-A300002	SIL-A300002
4	Cabinet, Black	PLC-A300001	N/A	PLC-A300001	N/A
	Cabinet, White	N/A	PLC-A300002	N/A	PLC-A300002
5	Shelf, Evaporator	SMT-A300001	SMT-A300001	SMT-A300001	SMT-A300001
6	Gasket, Faucet, Black	SIL-A300003	N/A	SIL-A300003	N/A
	Gasket, Faucet, White	N/A	SIL-A300007	N/A	SIL-A300007
7	Hot Faucet, Black/Red	N/A	N/A	FAU-A300001	N/A
	Hot Faucet, White/Red	N/A	N/A	N/A	FAU-C000035
	Cook Faucet, Black/Black	FAU-A300003	N/A	N/A	N/A
	Cook Faucet, White/White	N/A	FAU-C000049	N/A	N/A
8	Cold Faucet, Black/Blue	FAU-A300004	N/A	FAU-A300004	N/A
	Cold Faucet, White/Blue	N/A	FAU-C000048	N/A	FAU-C000048
9	Drip Tray, Black	PLC-A300006	N/A	PLC-A300006	N/A
	Drip Tray, White	N/A	PLC-A300007	N/A	PLC-A300007
10	Support Strut, Right	SMT-A300005	SMT-A300005	SMT-A300005	SMT-A300005
11	Base, Compressor	SMT-A300002	SMT-A300002	SMT-A300002	SMT-A300002
12	Power Cord	ELE-A300001	ELE-A300001	ELE-A300001	ELE-A300001
13	Support Strut, Left	SMT-A300006	SMT-A300006	SMT-A300006	SMT-A300006
14	Overload protector	REF-C100423	REF-C100423	REF-C100423	REF-C100423
15	Relay	REF-C100424	REF-C100424	REF-C100424	REF-C100424
16	Heat Band	N/A	N/A	ELE-A300008	ELE-A300008
17	Thermostat-85C	N/A	N/A	ELE-A300006	ELE-A300006
18	Limiter-95C	N/A	N/A	ELE-A300007	ELE-A300007
19	Cold Control	REF-A300001	REF-A300001	REF-A300001	REF-A300001
20	Switch, Hot Tank	N/A	N/A	ELE-A300003	ELE-A300003
21	Hot Tank Assy	N/A	N/A	SUB-A300001	SUB-A300001
22	Handle	PLC-A300008	PLC-A300008	PLC-A300008	PLC-A300008
23	Insulation, Shelf	REF-A300003	REF-A300003	REF-A300003	REF-A300003
24	Insulation, Reservoir	REF-A300002	REF-A300002	REF-A300002	REF-A300002
25	Baffle	PLC-A300003	PLC-A300003	PLC-A300003	PLC-A300003
26	Aspen Silicone Drain Tube	N/A	N/A	SIL-C100176	SIL-C100176
29	Vent Tube, Hot Tank	N/A	N/A	SIL-A300006	SIL-A300006
33	Aspen Silicone Tee fitting	N/A	N/A	PLC-C100469	PLC-C100469
35	Hot Tank Drain Cap	N/A	N/A	PLC-C100470	PLC-C100470
36	Hot Tank Drain Plug	N/A	N/A	SIL-C100182	SIL-C100182
37	Drain valve bracket	N/A	N/A	PLC-C100471	PLC-C100471
39	Drain Cover	N/A	N/A	PLC-C100405	PLC-C100405

Product Dimensions

Aspen (bottled water cooler)



Front



Side



SECTION 3: Receiving Instructions

RECEIVING

Inspect the cooler box immediately and carefully for any evidence of shipping or handling damage before signing to receive goods. In case of shipping damages, claims should be filed immediately with the carrier. Please note that the carrier will not accept claims for any damage discovered after signing for UN-INSPECTED GOODS.

Ensure the cooler stands upright for 24 hours before plugging it in.

OPERATION

1. Place the water cooler on a flat level surface in a cool shaded location near a grounded wall outlet.
2. Position the water cooler so that the back of the unit is a minimum of 4 inches/10 cm away from the wall to ensure proper ventilation.
3. Place the water bottle on top of the cooler appropriately.

Note: On Hot & Cold models, vent the hot tank by holding the hot faucet open until water flows out.

4. Plug power supply cord into receptacle. Please ensure that cooler is set up so as access to the power outlet and plug is unobstructed. Turn on hot tank switch.

Note: To provide additional protection from the risk of shock, this unit **MUST** be connected to a ground fault circuit interrupter (GFCI) outlet at all times. Use of an extension cord will void any warranties.

5. Do not draw water from the cooler for about 30 minutes to let the water cool or heat. Optimum water temperatures will be reached after several hours of operation.

6. Ensure the following when cooler is to be serviced:

6.1 Turn off Hot Tank Switch (Hot & Cold models only) and disconnect power supply cord.

6.2 Remove bottle from reservoir.

6.3 Use a bucket to drain water from the cold water reservoir through faucets. On Hot & Cold models, turn off hot tank switch as above. Allow 1 hour for the hot water to cool down inside the hot water tank.

Remove the drain plug at the rear of the cooler to drain into a container.

Service / Maintenance

Notice:

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Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

Electrical Diagnosis

Note: Begin with the unit unplugged, the water drained and the cabinet removed.

The following electrical parts can be tested for continuity using a multi-meter: hot tank thermostat and limiter, cold control and the compressor overload.

1. Set the multi-meter to audible for steps 1, 2 and 3,4. To test the hot thermostat and limiter (begin with the protective cover removed) (Figure 4-1-1), contact one sensor probe on the upper terminal and the other on the lower terminal of the same part (Figure 4-1-2 and 4-1-3). If continuity is detected the part is good.



Figure 4-1-1



Figure 4-1-2



Figure 4-1-3

2. To test the cold control, position the sensor probes on the bottom two terminals of the cold control (Figure 4-1-4). If continuity is detected the part is good.

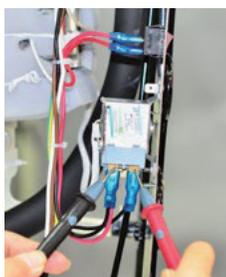


Figure 4-1-4

3. To test the overload of compressor (begin with components protect cover, relay and overload removed), connect one probe through the metal sleeve center and the other on the terminal (Figure 4-1-5). If continuity is detected the part is good.



Figure 4-1-5

The heater band can be tested for resistance using a multi-meter set to 200Ω or tested using the continuity setting.

4. Touch the two terminals on heater band with the sensor probes (Figure 4-1-6). The proper resistance is within a range of 25.61 to 29.88 Ω (Figure 4-1-7).



Figure 4-1-6



Figure 4-1-7

An amperage draw test can be done on the compressor and the heater using a clamp meter.

5. With the hot tank switched off and the unit unplugged. Locate the main lead wire coming in from the power cord to the cold control (Figure 4-1-8) position clamp meter around this wire and switch on (Figure 4-1-9).



Figure 4-1-8



Figure 4-1-9

6. Plug in the dispenser. After an initial spike the reading should be within the range of 1.1-1.6A (Figure 4-1-10). Turn on the hot tank switch; and the reading should increase to a range of 4.5 - 5.1A (Figure 4-1-11).

Caution: do not leave hot tank switch on for longer than 5 seconds.



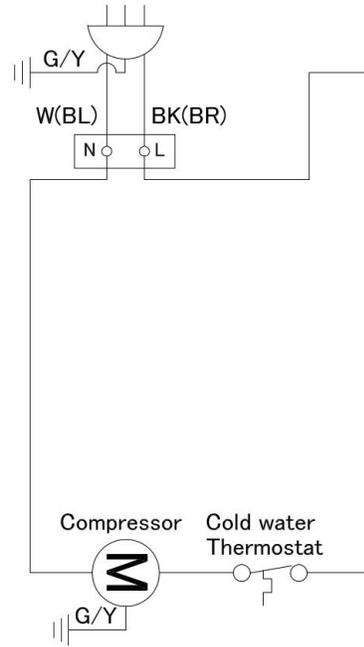
Figure 4-1-10



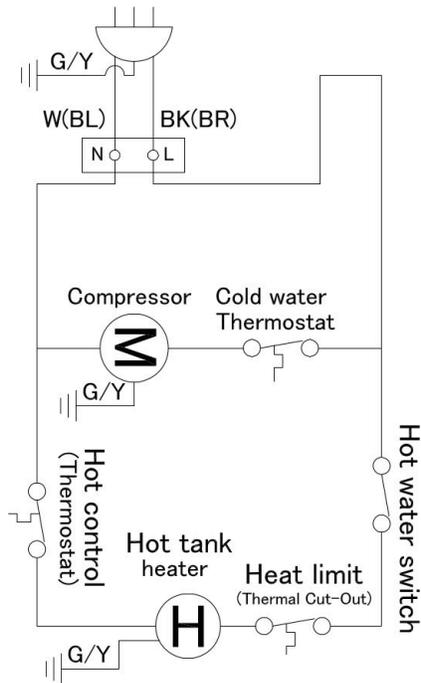
Figure 4-1-11

Electric Diagrams

ANSA2KTK1AC & ANSA2WTW1AC



ANSA2KHK1AC & ANSA2WHW1AC



Service / Maintenance

Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

Cold Control Adjustment

Note: the cold control can be adjusted without removal of the cabinet. The adjustment screw is accessible approximately 2 inches (5 cm) lower from the power switch of cooler on the back left side (when viewed from the back of cooler).

Factory Setting: 12:00

Note: to identify the 12:00 setting position, rotate the set screw clockwise until it is vertical (screw should turn with light pressure, do not force). The top of the slotted screw is (now) in the 2:00 position. Rotate the screw counterclockwise to the 12:00 position (Figure 4-3-1 to Figure 4-3-2).



Figure 4-3-1



Figure 4-3-2

To make the water colder, rotate the screw in the clockwise direction approximately 1 hour position. Allow the cooler to stabilize for 2-3 hours to ensure proper temperature of the cold water. (Note: do not change the setting by more than 1 hour setting at a time to prevent freezing).

To make the water warmer, rotate the screw in the counter-clockwise direction approximately 1 hour position. Allow the cooler to stabilize for 2-3 hours to ensure the proper temperature of the cold water.

Service / Maintenance

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No Spill Device Removal and Installation

1. Lift upwards to remove water bottle (Figure 4-4-1)



Figure 4-4-1

2. Remove no spill device of cooler by turning counter clockwise or to the left (Figure 4-4-2) until the arrow corresponding with the “OPEN” text is aligned with the mark on the cabinet (Figure 4-4-3 and Figure 4-4-4).



Figure 4-4-2



Figure 4-4-3



Figure 4-4-4

3. Install in reverse order.

Service / Maintenance

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Cabinet Removal and Installation

1. Unplug cooler from power source (Figure 4-5-1).



Figure 4-5-1

2. Empty and remove water bottle (Figure 4-5-2) and drain cooler reservoir through the faucets until empty (Figure 4-5-3). If cooler is a hot and cold, the hot tank must be drained from the drain plug located on the back of unit on the lower right side (Figure 4-5-4). Also, shut hot tank switch off.

CAUTION

The water in the hot tank is very hot; after unplugging cooler, allow 2 hours for water to cool down before removing the drain cap to drain the system!



Figure 4-5-2



Figure 4-5-3



Figure 4-5-4

3. Lift upwards to remove no spill device of cooler by turning counter clockwise or to the left (Figure 4-5-5) until the arrow corresponding with the "OPEN" text is aligned with the mark on the cabinet (Figure 4-5-6 and Figure 4-5-7).



Figure 4-5-5



Figure 4-5-6



Figure 4-5-7

4. Remove faucets by turning counter clockwise (Figure 4-5-8)



Figure 4-5-8

5. Tip the cooler over on its back side (condenser down). On the bottom of the dispenser, remove the screw from near the front of the cabinet (Figure 4-5-9). Stand the unit up and rotate to view the back of the cooler. Remove the 4 screws that secure the metal top and bottom plate, 2 on top (Figure 4-5-10) and 2 on the bottom (the outside screws) (Figure 4-5-11). Leave the 4 screws that hold the black grill to the top & bottom plate secure.



Figure 4-5-9



Figure 4-5-10



Figure 4-5-11

6. The refrigeration system is now ready to be slid out of the plastic cabinet .

7. Move the refrigeration system to the right side of the cabinet to allow the top and bottom shelves to bypass the cabinet edges (Figure 4-5-12 and Figure 4-5-13). Then move to the left to release the opposite side of the top and bottom shelves (Figure 4-5-14 and Figure 4-5-15).



Figure 4-5-12



Figure 4-5-13



Figure 4-5-14



Figure 4-5-15

8. Hold the condenser on the right hand side and slowly pull outwards on the bottom of the system until the base plate clears the bottom of the cabinet (Figure 4-5-16 to Figure 4-5-17). Tip the body upwards from the base, allowing the refrigeration system to stand on its own, and pull outward on the sides of the cabinet and lift upwards to remove from the top of the refrigeration system (Figure 4-5-18 and Figure 4-5-19).



Figure 4-5-16



Figure 4-5-17



Figure 4-5-18



Figure 4-5-19

Service / Maintenance

Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

Cold Control Removal and Installation

1. Turn off hot tank power switch (located at the left of back)(Figure 4-6-1) and unplug the water cooler (Figure 4-6-2).



Figure 4-6-1



Figure 4-6-2

2. Remove no spill device from the water dispenser (Figure 4-6-3 and Figure 4-6-4) (see section for no spill device Removal Instructions).



Figure 4-6-3



Figure 4-6-4

3. Remove cabinet from the water dispenser (Figure 4-6-5) (see section for Cabinet Removal Instructions).



Figure 4-6-5

4. Remove the 4 screws of the cold control and the protect cover (Figure 4-6-6 and Figure 4-6-7).



Figure 4-6-6

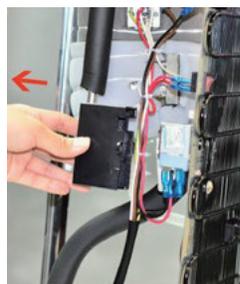


Figure 4-6-7

5. Remove cold control from the back panel (Figure 4-6-8).



Figure 4-6-8

6. Remove the wires from the bottom of the cold control, taking care to identify where which terminals are installed (Figure 4-6-9 to Figure 4-6-10).

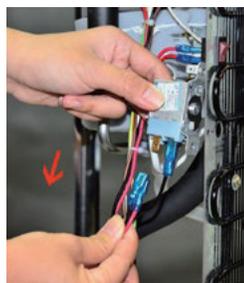


Figure 4-6-9

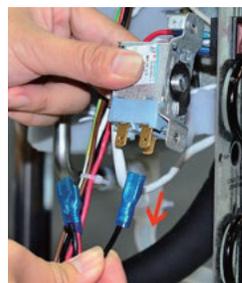


Figure 4-6-10

7. Remove the ties of cold tank insulation and take away the insulation upward (Figure 4-6-11 and Figure 4-6-12). Remove the 2 screws on condenser and reservoir mounting plate (Figure 4-6-13). Tear off the foam insulation layers start from bottom carefully until the end of cold control sensor line appears. (Figure 4-6-14).



Figure 4-6-11



Figure 4-6-12

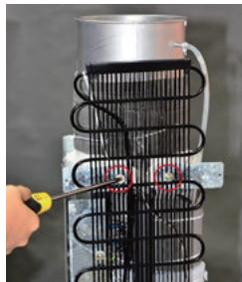


Figure 4-6-13



Figure 4-6-14

8. Remove the cold control sensor tube from the reservoir and insulation(Figure 4-6-15).

Note: If required, install the plastic tube cover onto the replacement cold control .

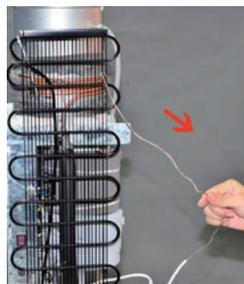


Figure 4-6-15

9. (Begin with foam insulation tape prepared.) (Figure 4-6-16). Align the sensor tube of the replacement cold control approximately 1/2 inch (12mm) below the evaporator coil. Install the replacement foam tape over the sensor tube and press to secure on the reservoir (Figure 4-6-17 to Figure 4-6-19).

Note: Care should be taken while installing the sensor tube in the proper position. Mark the location of the cold control sensor to properly install new control .



Figure 4-6-16



Figure 4-6-17



Figure 4-6-18



Figure 4-6-19

10. Reconnect the cold control wires (ensure wires are connected properly)(Figure 4-6-20 and Figure 4-6-21).



Figure 4-6-20

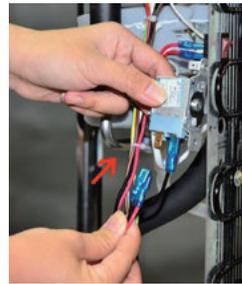


Figure 4-6-21

11. Reinstall replacement cold control and protective cover onto back plate. (Figure 4-6-22 and Figure 4-6-23).



Figure 4-6-22

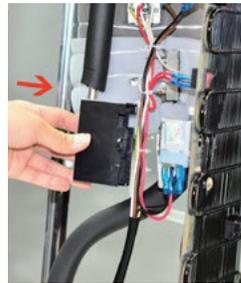


Figure 4-6-23

12. Reinstall the 2 screws for condenser and reservoir mounting plate, reinstall the reservoir insulation and ties. (Figure 4-6-24 to Figure 4-6-26).



Figure 4-6-24



Figure 4-6-25



Figure 4-6-26

13. Reinstall the cabinet and no spill device (Figure 4-6-27 to Figure 4-6-29).

Note: Ensure proper thermostat setting (see section for cold control setting).



Figure 4-6-27



Figure 4-6-28



Figure 4-6-29

Service / Maintenance

Notice:

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Hot Tank Hot Thermostat / Limiter Replacement

Note: Begin with the unit unplugged, the water drained and the cabinet removed. Tip: Use a small flathead screw driver to pry wire connectors off.

1. Remove protective cover from the hot thermostat and limiter (Figure 4-7-1). Identify the wires and installation locations and disconnect from the hot thermostat and limiter. (Figure 4-7-2 to Figure 4-7-3). Remove the screws from the Ground Wire (Yellow/Green Wire) and mounting plate (Figure 4-7-4 and Figure 4-7-5), and remove the thermostat from the bracket (Figure 4-7-6).



Figure 4-7-1

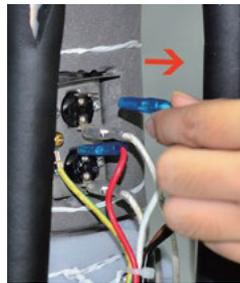


Figure 4-7-2



Figure 4-7-3



Figure 4-7-4



2. There is enough heat transfer paste on the tank and the old thermostat to simply wipe the face of the replacement thermostat against the old one. (Figure 4-7-7).



Figure 4-7-7

3. Assemble the thermostat and mounting bracket and reinstall mounting screws. (torque setting 3.4-6.9 lbf.in) (Figure 4-7-8 and Figure 4-7-9). Reinstall the ground wire (Yellow/Green Wire) (Figure 4-7-10). Connect the wires to the thermostat as identified (Figure 4-7-11). Reinstall the protective cover (Figure 4-7-12).



Figure 4-7-8



Figure 4-7-9



Figure 4-7-10

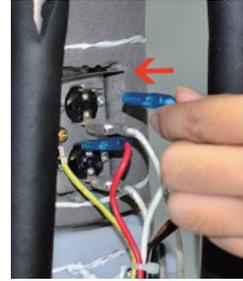


Figure 4-7-11



Figure 4-7-12

Note: Both thermostat and limiter can be changed in the same method. Please note that the Hot Thermostat is located in the upper position, whereas the Limiter is in the lower position.

Service / Maintenance

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Hot Tank Removal and Replacement

Note: Begin with the unit unplugged, the water drained and the cabinet removed. Tip: Use a small flathead screwdriver to pry wire connectors off. Use a 3/8" spanner to loosen nut.

Remove the Hot Tank:

1. Snip the upper tie of Tee connector (and tube) from the bottom of Hot Tank (Figure 4-8-1). Disconnect the Tee connector from the bottom of the Hot Tank (Figure 4-8-2).



Figure 4-8-1



Figure 4-8-2

2. Snip the tie securing the silicone line to the vent tube connection and disconnect the vent tube (Figure 4-8-3 and Figure 4-8-4).



Figure 4-8-3



Figure 4-8-4

3. Loosen the nut and remove the nut, washer and metal plate (located below the Top Shelf) to separate the Cold Reservoir from the Top Shelf. (3/8") (Figure 4-8-5 and Figure 4-8-6).



Figure 4-8-5

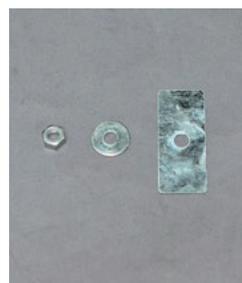


Figure 4-8-6

4. Remove the thermostat cover (Figure 4-8-7), identify and remove the terminals (Figure 4-8-8 and Figure 4-8-9), remove the grounding terminal and the screw (Figure 4-8-10).

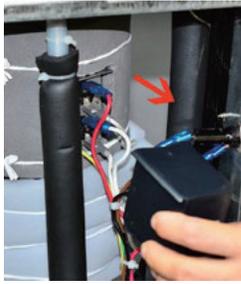


Figure 4-8-7



Figure 4-8-8



Figure 4-8-9



Figure 4-8-10

5. Remove the 6 screws from the top (front and side) of the support brackets (Figure 4-8-11 to Figure 4-8-13). Remove the 3 screws from the front of the Top Shelf (Figure 4-8-14). Remove 2 screws from back of condenser (Figure 4-8-15)

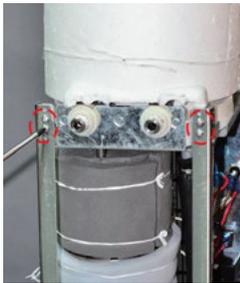


Figure 4-8-11



Figure 4-8-12



Figure 4-8-13



Figure 4-8-14



Figure 4-8-15

6. Lift Cold Reservoir assembly upwards to permit access to Hot Tank mounting screws (Figure 4-8-16). Remove 2 mounting screws (Figure 4-8-17). Remove Hot Tank assembly from Dispenser (Figure 4-8-18).



Figure 4-8-16



Figure 4-8-17



Figure 4-8-18

7. Remove 2 screws from "L" shape mounting bracket (Figure 4-8-19 and Figure 4-8-20).



Figure 4-8-19



Figure 4-8-20

8. Remove the wire ties and insulation from the Hot Tank (Figures 4-8-21 to Figure 4-8-25).



Figure 4-8-21



Figure 4-8-22



Figure 4-8-23



Figure 4-8-24



Figure 4-8-25

9. Remove the 4 screws securing the thermostat and limiter to the hot tank (Figure 4-8-26 and Figure 4-8-27), taking care not to wipe the white thermal paste off of the thermostat and limiter (will be sufficient to use for installation onto replacement hot tank).



Figure 4-8-26

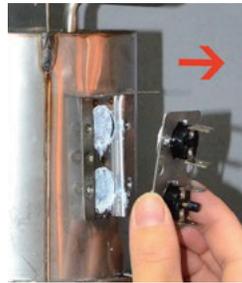


Figure 4-8-27

10. Remove the Heater Band from the Hot Tank (see instructions for Heater Band Replacement) (Figure 4-8-28 and Figure 4-8-29).



Figure 4-8-28



Figure 4-8-29

Replace a new Hot Tank:

11. Install the Heater Band onto the replacement Hot Tank (see instructions for Heater Band Replacement) (Figure 4-8-30).



Figure 4-8-30

12. Install the thermostat and limiter and mounting plate. (Torque screws to range of 3.4 to 6.9 lbf.in) (Figure 4-8-31 and Figure 4-8-32) **Note:** Limiter installed in the lower position.

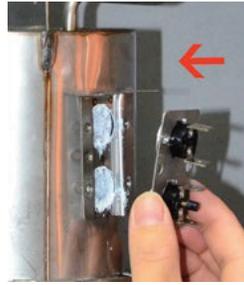


Figure 4-8-31



Figure 4-8-32

13. Install insulation and wire ties. (Figure 4-8-33 and Figure 4-8-34). Install “L” shape bracket on top of the tank (Figure 4-8-35 and Figure 4-8-36).



Figure 4-8-33



Figure 4-8-34

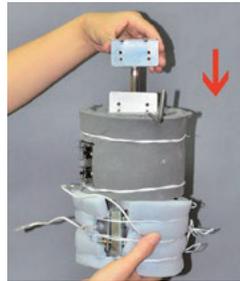


Figure 4-8-35



Figure 4-8-36

14. Install replacement hot tank assembly into cooler following steps 1-6 in reverse order.

Service / Maintenance

Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

Heater Band Replacement

Note: Begin with the unit unplugged, the water drained and the cabinet removed. **Tip:** Use a small flathead screw driver to pry wire connectors off.

1. Remove the thermostat protective cover (Figure 4-9-1). Carefully remove the 2 wire connectors of heater band from the thermostat and limiter (Figure 4-9-2 and Figure 4-9-3).



Figure 4-9-1

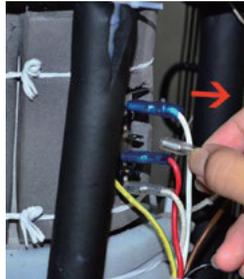


Figure 4-9-2

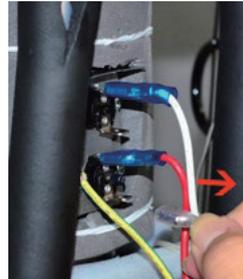


Figure 4-9-3

2. Remove the ties and white insulation of hot tank (Figure 4-9-4 and Figure 4-9-5). Remove the 2 screws and nuts that tighten the heater band onto the hot tank (Figure 4-9-6). Turn the heater band until the opening lines up with the stainless tube and pull down to remove completely from the hot tank (Figure 4-9-7 to Figure 4-9-9).



Figure 4-9-4



Figure 4-9-5

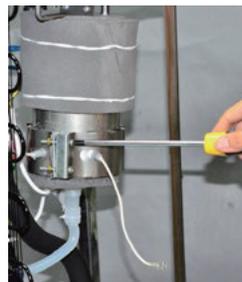


Figure 4-9-6

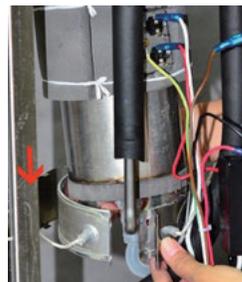


Figure 4-9-7



Figure 4-9-8



Figure 4-9-9

3. Install the new heater band by following the steps above in reverse order, ensuring that the wire terminals of heater band are located near the top of the heater band (Figure 4-9-10). Reinstall the screws and nuts then tighten them until it touches hot tank properly (Figure 4-9-11).



Figure 4-9-10



Figure 4-9-11

4. Reconnect the wire connectors to the thermostat and limiter (Figure 4-9-12 and Figure 4-9-13). Reinstall the protective cover (Figure 4-9-14). Reinstall the white insulation and ties (Figure 4-9-15 and Figure 4-9-16).



Figure 4-9-12



Figure 4-9-13



Figure 4-9-14



Figure 4-9-15



Figure 4-9-16

Service / Maintenance

Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

Compressor Relay / Overload Replacement

Note: Begin with the unit unplugged, the water drained and the cabinet removed. Tip: Use a small flathead screwdriver to pry wire connectors and relay from compressor.

1. Remove the relay/overload cover by prying the metal clip to unhook it from the compressor on both sides (Figure 4-10-1 and Figure 4-10-2).



Figure 4-10-1

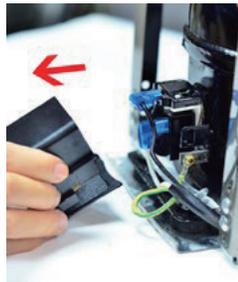


Figure 4-10-2

2. Carefully remove and identify the wire connectors from the relay (white wires) and/or overload (black wire) (Figure 4-10-3 and Figure 4-10-4). Remove relay and overload from compressor (Figure 4-10-5 and Figure 4-10-6).

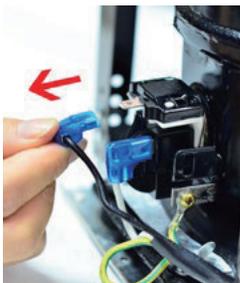


Figure 4-10-3

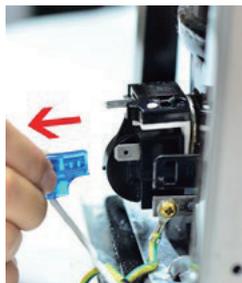


Figure 4-10-4



Figure 4-10-5



Figure 4-10-6

3. Install the new overload onto the top pin of the compressor (Figure 4-10-7) and push the new relay onto the two bottom pins below the overload (Figure 4-10-8). Reconnect the black wire onto the overload (Figure 4-10-9) and the white wire onto the relay (Figure 4-10-10).



Figure 4-10-7



Figure 4-10-8

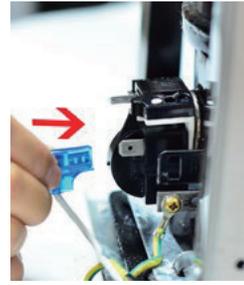


Figure 4-10-9

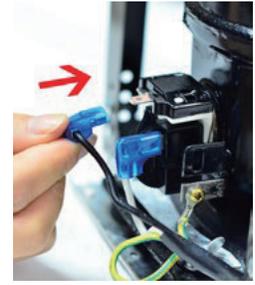


Figure 4-10-10

4. Reinstall the cover and secure with the metal clip (Figure 4-10-11 and Figure 4-10-12). **Note: use caution not to damage wires.**

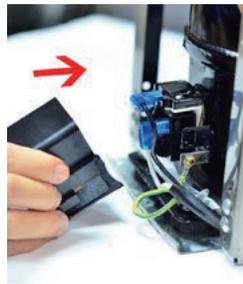


Figure 4-10-11



Figure 4-10-12



SECTION 5: Trouble Shooting

Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

Symptom	Solution Checklist
No Cold Water and No Hot Water	<ul style="list-style-type: none"> a. Check that the cooler is plugged in and the hot tank switch is turned on. b. Check water in bottle. c. Check faucets operation.
No Cold Water	<ul style="list-style-type: none"> a. Check cold control. b. Wait for water to be refrigerated before dispensing. c. Check ventilation of the condenser – Ensure adequate condenser air circulation. Place cooler at least 4” (10cm) from wall. d. Check baffle –Reinstall if necessary.
No Hot Water	<ul style="list-style-type: none"> a. Wait for water to be heated before dispensing. b. Check that hot water switch is in the “ON” position. c. Check wires and connectors. d. Check heat limiter and thermostat.
Unit Runs Noisy	<ul style="list-style-type: none"> a. Ensure that cooler is on flat surface. b. Move the cooler away from other appliances. c. Check for vibration at refrigeration line.
Water Leaking	<ul style="list-style-type: none"> a. Check that the cold water tank is not overfilled. b. Check for the any leaks in the bottle. c. Check hot water drain cap. d. Check for loose faucet or damaged faucet gasket.

Cleaning and Sanitization

Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

Scheduled cleaning and sanitisation is recommended to ensure the integrity of your drinking water. Scheduling will vary depending on the conditions and environment in which the cooler is in use. Follow the steps outlined below under Cleaning Instructions for sanitisation methods of the water contact points.

For cleaning exterior surfaces use only mild dishwashing liquid detergent. **DO NOT USE** bleach or abrasive cleaners.

CAUTION: DO NOT IMMERSE THE UNIT IN WATER OR CLEAN USING PRESSURE WASHER.

1. Turn off hot tank power switch (located at the left of back)(Figure 6-1) and unplug the water cooler (Figure 6-2).

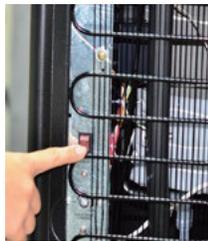


Figure 6-1



Figure 6-2

2. Remove the water bottle (Figure 6-3) and drain excess water through the faucets. (Figure 6-4) On Hot & Cold models turn hot tank switch off and allow 2 hours for the hot water to cool down. Remove drain plug at the rear of the cooler and drain water into a container(0.4 of a gallon or 1.8L)(Figure 6-5 and Figure 6-6).

CAUTION

THE WATER IN THE HOT TANK IS VERY HOT; AFTER UNPLUGGING COOLER, ALLOW 2 HOURS FOR WATER TO COOL DOWN BEFORE REMOVING THE DRAIN CAP TO DRAIN THE SYSTEM!



Figure 6-3



Figure 6-4



Figure 6-5



Figure 6-6

3. Remove no spill device (see section for no spill device Removal Instructions) (Figure 6-7 and Figure 6-8).



Figure 6-7



Figure 6-8

4. Remove baffle by pulling straight up and set aside (Figure 6-9).



Figure 6-9

5. Add one and a half tablespoons of vinegar to 1 gallon (4.5 L) of clean water and pour into reservoir. Wipe the internal reservoir components, baffle and faucets with a clean cloth (Figure 6-10 and Figure 6-11). Let solution stand for five minutes .



Figure 6-10



Figure 6-11

6. Using the brush attachment, vacuum the condenser and all accessible areas to remove dirt, lint and debris (Figure 6-12). Or: Use a stiff non-metallic scrub brush to remove dirt and debris from the condenser. Use a damp cloth to wipe down condenser (Figure 6-13).

CAUTION: DO NOT CLEAN USING PRESSURE WASHER OR ANY DIRECT WATER CONTACT.



Figure 6-12



Figure 6-13

7. Rinse baffle and both faucets thoroughly with clean water several times.

8. Reinstall the baffle, faucet, no spill device, white silicone plug and drain cap (Figure 6-14 to Figure 6-17).



Figure 6-14



Figure 6-15



Figure 6-16



Figure 6-17

9. Place a new bottle on the cooler. Important: **Prior to plugging in cooler, vent the hot tank by holding the hot faucet open until water flows.**

10. Draw one cup of water from each faucet and discard.

11. Plug the cooler in and turn on the hot tank switch (Figure 6-18 and Figure 6-19). Do not draw water from the cooler for 30 minutes to let the water cool and heat. Optimum water temperatures will be reached after 1-2 hours of operation.



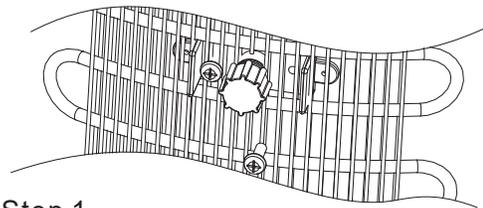
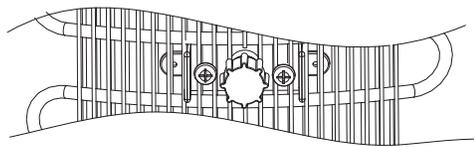
Figure 6-18



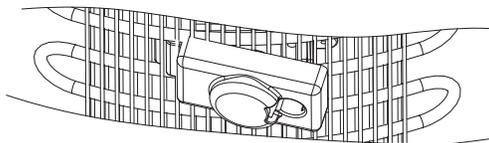
Figure 6-19

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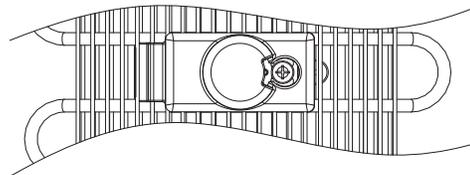
Drain Cover Installation



Step 1
- Take down the right side screw
(but keep the left side screw)



Step 2
- Install the Drain Cover (PLC-C100405)



Step 3
- Install back the right side screw on

Note: Fastening torque of the screw is 4.5kgf.cm

SUB-C200773 20 Set Bulk Pack-Aspen/Nordic Drain Cover
SUB-C200774 100 Set Bulk Pack -Aspen/Nordic Drain Cover



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